HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

3194.1019-009

U.S. APPLICATION NO. (If known, see 37 C

INTERNATIONAL	APPLICATION NO
PCT/US200	4/023491

INTERNATIONAL FILING DATE 21 July 2004 (21.07.2004) EARLIEST PRIORITY DATE CLAIMED 21 July 2003 (21.07.2003)

TITLE OF INVENTION

Hydride Gas Purification for the Semiconductor Industry

CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

APPLICANT(S) FOR DO/EO/US

Daniel Alvarez, Jr., Jeffrey J. Spiegelman, Joshua T. Cook, Tram Doan Nguyen, Daniel A. Lev and Troy B.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. [x]
- This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. []
- This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include [] items (5), (6), (9) and (21) indicated below.
- The US has been elected (Article 31). [x]
- A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - is attached hereto (required only if not communicated by the International Bureau).
 - has been communicated by the International Bureau. []
 - is not required, as the application was filed in the United States Receiving Office (RO/US).
- An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). 6. []
 - is attached hereto. []
 - has been previously submitted under 35 U.S.C. 154(d)(4).
- Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) [x]
 - are attached hereto (required only if not communicated by the International Bureau).
 - have been communicated by the International Bureau. b.
 - have not been made; however, the time limit for making such amendments has NOT expired. []
 - have not been made and will not be made.
- An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
- An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (Except for Spiegelman.) [x]
- An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. [] Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

- An Information Disclosure Statement under 37 CFR 1.97 and 1.98 (3 pgs.) w/PTO Form 1449 (2 pgs.) w/reference & copy of International Search Report.
- An assignment document for recording. Except for Spiegelman. A separate cover sheet in compliance with 37 CFR 12. [x] 3.28 and 3.31 is included.
- A preliminary amendment (3 pgs). 13. [x]
- An Application Data Sheet under 37 CFR 1.76. 14. []
- 15. [] A substitute specification.
- A power of attorney and/or change of address letter. 16. []
- A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 1.825. 17. []
- A second copy of the published International Application under 35 U.S.C. 154(d)(4). 18. []
- A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 19. []
- Other items or information: 20. []

U.S. APPLICATION N	6, (if known, see 37-CER.1.5)		DNAL APPLICATIO 32004/02349		ľ	S DOCKET NUMBER 194.1019-009	
The following	ng fees have been sub	L mitted			1	CALCULATIONS	PTO USE ONLY
	•				\$300	\$300	
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	by IPEA/US indicates						
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7111 Other Situation			22 and 23 =			\$900	
[] Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.							
Total Sheets	Extra sheets	Number	Number of each additional 50 or fraction thereof (round up to a whole number) RATE				
32 - 100 =	0 /50 =		x \$250		\$0		
Surcharge of \$1	30.00 for furnishing	any of the se	earch fee, exam	nination fee, or the	oath or	\$	
	r the date of commen				199.		<u> </u>
CLAIMS	NUMBER	FILED	NUMBER EXTRA	RATE			
Total clain	ms 2	- 20 =	1	x \$50		\$50	
Independent c	laims	2 - 3 =	0	x \$200		\$0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ \$360		\$			
TOTAL OF ABOVE CALCULATIONS =					\$950		
					\$	†	
[] Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.			\$950				
SUBTOTAL =			φ930				
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).			\$				
TOTAL NATIONAL FEE =			\$950				
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +			\$40				
TOTAL FEES ENCLOSED =				\$990			
			1.	O I ALL LEED BITC	20011	Amount to be refunded:	\$
	·					Amount to be charged:	\$

IAP15 Rec'E PCT. 2/2 20 JAN 2006

U.S	S. APPLICA	100 NO. (if known_see 32 CER 1.5)	INTERNATIONAL APPLICATION NO. PCT/US2004/023491	ATTORNEY'S DOCKET NUMBER 3194.1019-009					
a.	[x]	A check in the amount of \$	990 to cover the above fees is enclosed.						
ъ.	[]	lease charge my Deposit Account No. 08-0380 in the amount of \$[] to cover the above fees. A duplicate copy f this sheet is enclosed.							
c.	[X]	The Commissioner is hereby authorized to charge any deficiency or credit any overpayment in the fees that may be due in this matter to Deposit Account No. 08-0380. A duplicate copy of this sheet is enclosed.							
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.									
A C	lice O. C ustomer l	CORRESPONDENCE TO: arroll, Esq. No. 021005 DN, BROOK, SMITH & RE	YNOLDS, P.C.	SIGNATURE SIGNATURE					
530 Virginia Road				Alice O. Carroll NAME					
	O. Box 9 oncord, l	MA 01742-9133		2					
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				REGISTRATION NUMBER					

IN THE UNITED STATES RECEIVING OFFICE (RO/US) Designated/Elected Office (DO/EO/US)

U.S. National Stage of

International Application No.: PCT/US2004/023491

International Filing Date:

21 July 2004

Earliest Priority Date Claimed:

21 July 2003

Applicants:

Daniel Alvarez, Jr., Jeffrey J. Spiegelman,

Joshua T. Cook, Tram Doan Nguyen, Daniel A. Lev

and Troy B. Scoggins

Title:

HYDRIDE GAS PURIFICATION FOR THE

SEMICONDUCTOR INDUSTRY

Attorney's Docket No.:

3194.1019-009

Date: 20 JANUARY 2004
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